

HOV Pooled Fund Study Quarterly Status Report April 2006

Brief descriptions of current and future projects are provided in the following paragraphs. Additional information can be found at the HOV Pooled Fund Study web page at <http://hovcpfs.ops.fhwa.dot.gov/>.

HOV Facility Performance Monitoring, Evaluation and Reporting Handbook: The purpose of this project is to develop a handbook that will serve as a technical reference that provides guidance and recommended practices on the need for, how to initiate, sustain, and use information generated from monitoring, evaluating, and reporting on the performance of HOV facilities. This document is intended to be a comprehensive technical reference providing guidance on how to develop, implement, improve, and sustain a continuous performance monitoring, data management, evaluation and reporting program or initiative for an HOV system.

Project Champion: Mark Leth (Washington State DOT) and Steve Allen (Tennessee DOT)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Katie Turnbull (Texas Transportation Institute)

Proposed Cost: \$300,000 (FHWA Funds)

Period of Performance: 20 months

Products & Milestones:

- Final Handbook – Completed in February 2006.
- Primer – Completed in March 2006.
- Outreach Material (fact sheet, brochure, presentation, Q&A's) – Completed in March 2006.

Analysis of HOV Lane Hours of Operations and Eligibility Requirements: The overall objective of this project is to develop a handbook that will serve as a technical reference that provides guidance and recommended practices on how to assess specific policy-level choices and basic trade-offs related to setting and changing eligibility, operating periods and access restrictions between the HOV lane and general purpose lanes.

Project Champion: Chris Detmer (Virginia DOT) and Wayne Ugolik (New York State DOT)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Katie Turnbull (Texas Transportation Institute)

Proposed Cost: \$125,000

Period of Performance: 15 months

Products & Milestones:

- Handbook – Draft (May 2006); Final (June 2006).
- Outreach Material (fact sheet and FAQ's) – May 2006.

HOV Lane Enforcement Handbook: The purpose of this project is to develop a technical document that provides an update of state-of-the practice, with an emphasis on expanding on previous reference material and providing better focus on the use of technology in enforcement activities. Specifically, the effort would review past reference material such as the FHWA Enforcement Requirements for HOV Facilities (1978) and Caltrans HOV Lane Violations Study (1990); obtain input and survey enforcement practice from representatives of enforcement agencies involved in HOV projects, survey current technologies and their applicability to occupancy enforcement and update earlier prototype statutes from the FHWA Enforcement

Requirements for HOV Facilities Guide that could be used to implement automated violation enforcement.

Project Champion: Wayne Ugolik (New York State DOT) and Tim Buchanan (Caltrans)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Ginger Goodin (Texas Transportation Institute)

Proposed Cost: \$150,000

Period of Performance: 15 months

Products & Milestones:

- Draft Handbook – Available on project web page
- Final Handbook – May 2006.
- Outreach Material (fact sheet, presentations, tri-fold brochure, and FAQ's) – April 2006.
- White Paper – April 2006.

HOV Lane Safety Considerations Handbook: The purpose of this project is to develop a technical document addressing the issues, experience, considerations and best practices for safety enhancements of HOV facilities. Specifically, this effort will review existing reference materials, HOV facilities, facility operators and design practitioners throughout the United States in order to inventory existing guidance, practice and performance results, and develop guidance for design and operational considerations and recommended practices for safe design and operations of HOV facilities.

Project Champion: Laine Rankin (New Jersey DOT) and Chris Detmer (Virginia DOT)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Ginger Goodin (Texas Transportation Institute)

Proposed Cost: \$200,000

Period of Performance: 16 months

Products & Milestones:

- Final Draft Handbook – Available on project web page
- Final Handbook – May 2006.
- Outreach Material (fact sheet, presentations, tri-fold brochure, and FAQ's) – May 2006.
- White Paper – May 2006.

Analysis of HOV Lane Hours of Operations and Eligibility Requirements – Primer, Tri-Fold Brochure, and Presentations: The focus of this project is to develop additional outreach materials that were not covered in the initial phase of the project to assist in facilitating the transfer and use of the concepts and practices included in the technical reference to non-technical audiences that are critical to implementing and support HOV operation. These outreach materials will identify for a non-technical audience the key aspects and issues for their agencies to consider, the benefits and/or value, recommended practices and lessons learned, and profile successful practices.

Project Champion: Chris Detmer (Virginia DOT) and Wayne Ugolik (New York State DOT)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Rob Fernandez (Woodward Communications)

Proposed Cost: \$35,000

Estimated Period of Performance: 6 months

Products & Milestones:

- Project initiation – October 2005.

- Products to be produced: Primer, tri-fold brochure, and PowerPoint presentations.

HOV Facility Inventory and Clearinghouse: The overall objective of this project is to promote the exchange of HOV facility information between practitioners. By surveying HOV practitioners, consistent communication protocols can be established for the most commonly collected HOV data. Recipients would primarily be HOV practitioners at every level, and anybody with interest or knowledge in HOV related subjects with a need for information or desire to impart knowledge to others.

Project Champion: Neil Spiller

FHWA Work Order Manager: Neil Spiller

Contractor Lead: Jeff Benson (URS)

Proposed Cost: \$100,000

Estimated Period of Performance: 14 months

Products & Milestones:

- Project initiation – January 2006.
- Website design – July 2006.
- Clearinghouse maintenance plan – October 2006.
- Enhanced HOV facility inventory and web site – December 2006.
- Outreach material (fact sheet, presentations, and FAQ's) – February 2007.

Implications of Lane Pricing on Existing HOV Lanes: The objective of this project is to identify issues to consider with implementing pricing techniques on existing HOV lanes. This project will identify design and operational requirements, applicable techniques, cost analysis and estimation to transform HOV lanes into HOT lanes, technologies for operations, and needs, techniques, costs, and other related issues for effective enforcement. This project will build off of the FHWA HOT Lane Development Guide and provide more detailed guidance, procedures, and processes to assist practitioners in implementing pricing techniques on existing HOV lanes.

Project Champion: Terrance Hancock (Maryland State Highway Administration) and Chris Detmer (Virginia DOT)

FHWA Work Order Manager: Neil Spiller

Contractor Lead: TBD

Proposed Cost: \$150,000

Estimated Period of Performance: 14 months

Products & Milestones:

- Statement of work – completed.
- Project initiation – anticipated in June 2006.
- Products to be produced: A technical document, a primer, and outreach material (fact sheet, tri-fold brochure and presentation).

Automated Vehicle Occupancy Technologies Study: The objective of this project is to identify, compile, and systematically evaluate concepts, methods, and technologies for automated vehicle occupancy detection, verification and enforcement that are being researched, under development and on the horizon in the United States and abroad. Findings of this project will assist in identifying, developing, and implementing cost-effective, automated techniques for verifying and enforcing vehicle occupancy to continue offering high occupancy vehicle (HOV) preference in an effective way.

Project Champion: TBD

FHWA Work Order Manager: Neil Spiller
Contractor Lead: TBD
Proposed Cost: \$100,000
Estimated Period of Performance: 12 months

Products & Milestones:

- Statement of work – completed.
- Project initiation – anticipated in June 2006.
- Products to be produced: A synthesis report, a research report, and outreach material (fact sheet and presentation).

HOV Marketing Handbook – Revision: This effort will perform a comprehensive revision on the existing HOV Marketing Manual. It will update current experience, fill these gaps and needs, and provide renewed marketing strategies to guide practitioners toward effective and successful outreach and marketing efforts. This effort will clearly define resources needed for ongoing marketing and public awareness activities, and provide example programs outlining how to reach out to key stakeholders (i.e., elected officials, local agencies, environmental advocacies and affected commuters) who have in the past had greatest impact on longevity of HOV lanes in operation.

Project Champion: Luisa Paiewonsky (Massachusetts Highway Department) and Chris Detmer (Virginia DOT)

FHWA Work Order Manager: Neil Spiller
Contractor Lead: TBD
Proposed Cost: \$250,000
Estimated Period of Performance: 16 months

Products & Milestones:

- Statement of work – March 2006.
- Project initiation – anticipated in Summer 2006.
- Products to be produced: A revised HOV Marketing Manual, a primer, and outreach material (fact sheet, tri-fold brochure, questions and answers, and training materials).

Evaluation of Markings and Delineation for Concurrent Flow HOV Lanes: This research will address the impact of different marking patterns on HOV facility operations, safety, and enforcement. Operational and safety data will be reviewed, quantitative measures will be developed; and case studies will be performed to evaluate the pros and cons of different types of markings for HOV lanes. Finally recommendations on markings for concurrent flow HOV facilities will be made.

Project Champion: TBD
FHWA Work Order Manager: Neil Spiller
Contractor Lead: TBD
Proposed Cost: \$200,000
Estimated Period of Performance: 18 months

Products & Milestones:

- Statement of work – March 2006.
- Project initiation – anticipated in Summer 2006.
- Products to be produced: A research report, a white paper, and outreach material (fact sheet and presentation).